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(FILE 'HOME' ENTERED AT 12:44:13 ON 16 OCT 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 12:44:35 ON 16 OCT 2006

L1 76 S (H FABP) AND (L FABP)
L2 9 S L1 AND REVIEW?
L3 3 DUPLICATE REMOVE L2 (6 DUPLICATES REMOVED)

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DUPLICATE 1

AN 2005:165847 BIOSIS

DN PREV200500165041

TI Fatty acid-binding proteins as plasma markers of tissue injury.

AU Pelsers, Maurice M. A. L. [Reprint Author]; Hermens, Wim T.; Glatz, Jan F. C.

CS CARIMDept Mol Genet, Maastricht Univ, POB 616, NL-6200 MD, Maastricht, Netherlands

maurice.pelsers@gen.unimaas.nl

SO Clinica Chimica Acta, (February 2005) Vol. 352, No. 1-2, pp. 15-35. print. ISSN: 0009-8981 (ISSN print).

DT Article

General Review; (Literature Review)

LA English

ED Entered STN: 27 Apr 2005

Last Updated on STN: 27 Apr 2005

AB Background: One of the novel and promising plasma markers for detection of tissue injury is the family of 15 kDa cytoplasmic fatty acid-binding proteins of which various tissue-specific types occur. Aims and Objectives: The present status of heart-type fatty acid-binding protein (H-FABP) as a diagnostic and prognostic marker for acute and chronic cardiac injury, as well as the preliminary diagnostic use of other types of FABP for detecting injury in other organs, is reviewed. Methods: This review is based on an overview of the literature on clinical diagnostics of various forms of organ injury, and uses additional literature on physiological aspects relevant for the interpretation of plasma marker concentrations. Results: H-FABP not only proves to be an excellent early marker for cardiac injury in acute coronary syndromes, but also allows detection of minor myocardial injury in heart failure and unstable angina. Preliminary results indicate that sensitivity, rule-out power and prognostic value of H-FABP in cardiac injury surpass the performance of the standard early marker myoglobin. The liver only contains liver-type FABP (L-FABP), but co-expression of H-FABP and L-FABP occurs in the kidney. Similarly, intestinal-type FABP (I-FABP) and L-FABP are found in intestines, and brain-type FABP (B-FABP) and H-FABP occur in the brain. Preliminary but promising applications of these proteins have been demonstrated for liver rejection, viability selection of kidneys from non-heart-beating donors (NHBD), inflammatory and ischemic bowel disease, traumatic brain injury and in the prevention of muscle injury in trained athletes. Conclusions: Further study of the diagnostic and prognostic use of various FABP types is warranted, but their clinical application will require further commercialization of automated and rapid assays. Copyright 2004 Elsevier B.V All rights reserved.

CC Clinical biochemistry - General methods and applications 10006

Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Porphyrins and bile pigments 10065

Pathology - Diagnostic 12504

Digestive system - Physiology and biochemistry 14004

Digestive system - Pathology 14006

Cardiovascular system - Physiology and biochemistry 14504

Cardiovascular system - Heart pathology 14506

Cardiovascular system - Blood vessel pathology 14508

Blood - Blood and lymph studies 15002

Blood - Blood cell studies 15004

Urinary system - Physiology and biochemistry 15504

Muscle - Physiology and biochemistry 17504

Muscle - Pathology 17506

Bones, joints, fasciae, connective and adipose tissue - Pathology 18006

Nervous system - Physiology and biochemistry 20504

Nervous system - Pathology 20506

Gerontology 24500

Pediatrics 25000

IT Major Concepts

Cardiovascular Medicine (Human Medicine, Medical Sciences); Clinical Chemistry (Allied Medical Sciences); Gastroenterology (Human Medicine, Medical Sciences); Neurology (Human Medicine, Medical Sciences); Orthopedics (Human Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms

brain: nervous system; cytoplasm; heart: circulatory system; kidney: excretory system; liver: digestive system; myocardium: circulatory system, muscular system; plasma: blood and lymphatics; serum: blood and lymphatics; skeletal muscle: muscular system; small intestine: digestive system; urine: excretory system; whole blood: blood and lymphatics

IT Diseases

congestive heart failure: heart disease, diagnosis
Heart Failure, Congestive (MeSH)

IT Diseases

intestinal injury: digestive system disease, injury, diagnosis

IT Diseases

ischemic bowel disease: digestive system disease, vascular disease, diagnosis

IT Diseases

liver injury: digestive system disease, injury, diagnosis

IT Diseases

myocardial infarction: heart disease, vascular disease, diagnosis
Myocardial Infarction (MeSH)

IT Diseases

skeletal muscle injury: injury, muscle disease, diagnosis, prevention and control

IT Diseases

traumatic brain injury: injury, nervous system disease, diagnosis
Brain Injuries (MeSH)

IT Diseases

unstable angina: heart disease, vascular disease, diagnosis
Angina, Unstable (MeSH)

IT Chemicals & Biochemicals

fatty-acid binding protein; myoglobin

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human (common): adolescent, adult, aged, aged/80 and over, child, infant, middle age, preadolescent child, female, male

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates